Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start		Rating **	Α	Issue No.		5		
LM End		Issue Type +	Ма	Location *		N/A		
Earthen Levee				GPS La	atituc	de/Longitude		
Category				Start		End		
Item	Flood Pre	Flood Preparedness & Training			0		0	
пеш			0		0			
DWR ID DWR_RD2031_01_s _ 2013_5								
		Action/	Commer	nts				
Inspector (Comments	: LMA has a f	lood resp	oonse plan.				

No Photos

		D :: ++					_
LM Start		Rating **	Α	Issue No.		6	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Category Earthen Levee				atitud	e/Longitude	
Calegory		Start		End			
Item	Emergency Supplies &				0		0
пеш	Equipmer	nt			٥		0
DWR ID	DWR_RD2	031_01_s _ 201	3_6				
Action/Comments							
Inspector Comments: Supplies available on-site.							

No Photos

LM Start		Rating **	Α	Issue No.		12			
LM End		Issue Type +	Ma	Location *		N/A			
Category	Earthen L	GPS Latitude/Longitude							
Calegory				Start		End			
Item	Operations & Maintenance				0		0		
Item	Manuals				0		0		
DWR ID	DWR ID DWR_RD2031_01_s _ 2013_12								
		Action/	Comme	nts					
Inspector (Comments	· O&M Manua	al availah	ole at the of	fice				

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

CR : Crown

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	0.46	Rating **	М	Issue No.		1	
LM End	0.46	Issue Type +	Ма	Location *		WS	
Category				GPS Lat	itud	e/Longitude	
Category				Start		End	
Item	DWR Ero	sion Survey		37.70474	o°	37.704740	
пеш				-121.15914	o°	-121.159140	
DWR ID	DWR_RD2031_01_s _ 2015_1						

Action/Comments

Inspector Comments: 07/31/2014: No significant change observed.

09/10/2013: No significant change observed. 07/18/2012: No significant change observed.

08/18/2011: No significant change observed on site. Debris that blocks the irrigation outlet is visible.

10/19/2010: No significant change observed on site. Sloughing of the bank is occurring adjacent to an irrigation outlet structure. There is moderate to heavy vegetation along the bank that is well established. Broken chunks and slabs of concrete are used as rip rap and line the outside of the irrigation outlet structure. However, much of the rip rap along the slope is sloughing and could possibly lead to future slope instability.

08/05/2010: Recommended as a local maintenance issue, per CLRO. 08/20/2009: No major change observed since last visit; 1 inch fissure cracks developing on the slope; rip rap is showing signs of sloughing; recommend as local maintenance issue; site was previously rated "U". 2008: No change from previous year; irrigation outlet located on site; rip rap placed on river bank.

09/06/2007: Near agricultural diversion; only 3' landside height differential. [2014 Site ID:RD2031U01RM0.48]



Looking down at the site. The irrigation outlet is operating. Debris is visible at the outlet.

LM Start	0.51	Rating **	М	Issue No.		2	
LM End	0.51	Issue Type +	Ма	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Vegetation			37.7040	50°	37.704050	0
пеш				-121.1595	78 °	-121.159578	0
DWR ID DWR_RD2031_01_s _ 2012_2							

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Remove vegetation 20 feet away from the levee crown.

Photo 1 of 2: SP_2015_RD2031_307_2_20150317_00002.jpg



View of vegetation on waterside slope. Facing upstream.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	0.51	Rating **	М	Issue No.		2 (cont)	
LM End	0.51	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory	Salegory				Start		
Item	Vegetatio	Vegetation			0 °	37.704050	٥
item			-121.15957	8 °	-121.159578	0	
DWR ID DWR_RD2031_01_s _ 2012_2							

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Remove vegetation 20 feet away from the levee crown.



10/26/2011 Updated photo of waterside vegetation.

LM Start	0.77	Rating **	М	Issue No.		36		
LM End	0.77	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Animal Control			37.7011	77 °	37.701177	0	
item			-121.1620	55 °	-121.162055	0		
DWR ID	DWR_RD2031_01_f _ 2012_36							

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of rodent burrows on landside slope.

LM Start	0.81	Rating **	С	Issue No.		20		
LM End	0.81	Issue Type +	Ma	Location *		LS		
Category	GPS Latitude/Longitude							
Category				Start		End		
Encroachments Item				37.70079	9°	37.700799	0	
пеш				-121.16241	8°	-121.162418	0	
DWR ID DWR_RD2031_01_s _ 2013_20								
Action/Comments								

Action/Comments

Pipe

Inspector Comments: PVC pipe present and obstructing drain pipe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	0.91	Rating **	N	Issue No.		49	
LM End	0.91	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee				atitud	e/Longitude	
Calegory				Start		End	
Trim / Thin Trees			37.6997	90 °	37.699790 °		
Item				-121.163730 °		-121.163730 °	
DWR ID	DWR_RD2	.031_01_s _ 201	5_49				
		Action/	Comme	nts			
Tree stum	ps.						



Photo 1 of 1: SP_2015_RD2031_307_49_20150330_00052.jpg

View of the tree stump on the waterside levee slope.

LM Start	1.00	Rating **	М	Issue No.		59
LM End	1.00	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Animal Co	ontrol		37.6993	27 °	37.699327°
item				-121.1653	64 °	-121.165364 °
DWR ID	DWR_RD2	031_01_f _ 201	4_59			
Action/Comments						

Exterminate rodents and backfill and compact or grout burrows.

No Photos

LM Start	1.14	Rating **	М	Issue No.		128	
LM End	1.14	Issue Type +	Ma	Location *		WS	
Category	Category Earthen Levee		Earthen Levee			le/Longitude	
Calegory				Start		End	
Itom	Animal Co	Animal Control			73 °	37.698873 °	
пеш	Item			-121.1677	85 °	-121.167785 °	
DWR ID	DWR_RD2	031_01_s _ 201	4_128				
	Action/Comments						

Exterminate rodents and backfill and compact or grout burrows.



View of the rodent hole on the waterside levee slope.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A : Not Applicable A : Acceptable N: Not Inspected/Rated M : Minimally Acceptable
U : Unacceptable WS: Water Side C : Corrected A/W : Acceptable but Monitor & Maintain CR : Crown En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	1.56	Rating **	М	Issue No.	3		
LM End	1.56	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	titud	le/Longitude	
Calegory			Start		End		
Item	Erosion /	Bank Caving		37.69877	76 °	37.698776	
item				-121.17432	27 °	-121.174327	
DWR ID	DWR_RD2	031_01_s _ 201	2_3				
Action/Comments							

Action/00

Note and monitor erosion site. Inspector Comments: Erosion is active around the irrigation standpipe.

LM Start	1.56	Rating **	М	Issue No.	3 (cont)
LM End	1.56	Issue Type +	Ma	Location *	LS



View of the erosion site on landside slope, facing upstream.

Photo 2 of 2: SP_2015_RD2031_307_3_20150317_00005.jpg



10/26/2011 Active erosion into the levee prism around irrigation standpipe.

LM Start	1.58	Rating **	М	Issue No.		8	
LM End	1.58	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee	GPS Lat	le/Longitude			
Category	'Y			Start		End	
Item	Erosion / Bank Caving			37.69861	°	37.698610 °	
пеш				-121.17459	8°	-121.174598 °	
DWR ID	DWR_RD2	031_01_s _ 201	2_8				
Action/Comments							
Note and r	Note and monitor erosion site.						

Inspector Comments: Active erosion is occurring around irrigation inlet.



10/26/2011 Active erosion shown around irrigation inlet.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	1.62	Rating **	A/W	Issue No.		52
LM End	1.62	Issue Type +	Ма	Location *	WS	
Category Earthen Levee GP				GPS La	tituc	le/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		37.69833	34 °	37.698334 °
пеш					76 °	-121.175176 °
DWR ID	DWR_RD2031_01_f _ 2013_52					
		A - 1' /	<u> </u>	- 1 -		

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of the multiple large rodent hole in the waterside levee slope.

LM Start	1.63	Rating **	М	Issue No.		9	
LM End	1.63	Issue Type +	Ма	Location *	LS		
	Earthen L	evee		GPS Latitude/Longitude			
Category			Start		End		
Item	Erosion / Bank Caving			37.6982	08 °	37.698208	0
item				-121.1754	00 °	-121.175400	0
DWR ID	DWR_RD2031_01_s _ 2012_9						

Action/Comments

Note and monitor erosion site.

Inspector Comments: Active erosion around irrigation inlet in levee prism.



10/26/2011 Active erosion into levee prism around irrigation inlet.

LM Start	2.00	Rating **	М	Issue No.		38		
LM End	2.07	Issue Type +	Ma	Location *		CR		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item		ırface / Depres	ssions /	37.6937	20 °	37.692782	٥	
пеш	Rutting				27 °	-121.177642	0	
DWR ID DWR_RD2031_01_s _ 2012_38								
		Action/	Comme	nts				

Repair depressions or ruts in the crown or slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	2.53	Rating **	М	Issue No.	54		
LM End	2.69	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Vegetatio	n		37.6874	18 °	37.686816	0
item				-121.1815	36 °	-121.184342	0
DWR ID DWR_RD2031_01_s _ 2015_54							
Action/Comments							

Control annual grass and weeds on the levee slopes and easements.



View of the vegetation on the levee slope.

LM Start	3.51	Rating **	A/W	Issue No.		24	
LM End	3.51	Issue Type +	Ma	Location *	ocation * V		
Category	evee	GPS Latitude/Longitude					
Calegory			Start		End		
Item	Encroach	ments		37.6908	64 °	37.690864	0
пеш	item			-121.1959	90°	-121.195990	0
DWR ID DWR_RD2031_01_s _ 2012_24							

Action/Comments

Pipe

Inspector Comments: Drain to channel

No Photos

LM Start	3.73	Rating **	М	Issue No.		56	
LM End	4.40	Issue Type +	Ma	Location *		CR	
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item	Vegetatio	n		37.689772	0	37.686397	٥
item				-121.199569	°	-121.207931	٥
DWR ID DWR_RD2031_01_s _ 2015_56							
			_				

Action/Comments

Control annual grass and weeds on the levee slopes and easements.

Photo 1 of 1 : SP_2015_RD2031_307_56_20150330_00055.jpg



View of the annual vegetation on the levee crown and slopes.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Stanislaus River	Left	7.07	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	5.37	Rating **	М	Issue No.	57		
LM End	7.07	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		37.6773	46 °	37.661837	0
item				-121.2175	37 °	-121.232954	0
DWR ID DWR_RD2031_01_s _ 2015_57							
Action/Comments							

Control annual grass and weeds on the levee slopes and easements.



View of the annual vegetation on the landside levee slope.

LM Start	6.15	Rating **	М	Issue No.		19	
LM End	6.40	Issue Type +	Ма	Location *	LS		
Category	GPS Latitude/Longitude						
Calegory			Start		End		
Item	Vegetatio	n		37.66898	38 °	37.668302	0
iteiii					14 °	-121.227842	0
DWR ID DWR_RD2031_01_s _ 2014_19							

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River	Right	5.98	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	0.71	Rating **	М	Issue No.	18		
LM End	1.40	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Itom	Vegetatio	n		37.6541	34 °	37.648209 °	
item	Item				16 °	-121.221174 °	
DWR ID DWR_RD2031_02_s _ 2015_18							
Action/Comments							

Control annual grass and weeds on the levee slopes and easements.



View of the annual vegetation on the landside levee slope.

LM Start	1.41	Rating **	М	Issue No.	15		
LM End	1.41	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Trim / Thi	n Trees		37.6480	80 °	37.648080 °	
пеш				-121.2210	31 °	-121.221031 °	
DWR ID DWR_RD2031_02_s _ 2013_15							
		A otion/	Commo	oto			

Trim trees to at least five feet above ground level.



View of the tree limb obstructing visibility and access to the landside levee slope.

LM Start	2.01	Rating **	М	Issue No.	25	
LM End	2.01	Issue Type +	Ма	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item Trim / Thin Trees				37.64087	74 °	37.640874
				-121.22387	70 °	-121.223870
DWR ID	WR ID DWR_RD2031_02_f _ 2014_25					
Action/Comments						

Trim trees to at least five feet above ground level.



View of the overgrown tree obstructing visibility and access of the landside levee slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River	Right	5.98	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	2.14	Rating **	М	Issue No.		21	
LM End	2.14	Issue Type +	Ма	Location *		CR	
Catagony	evee		GPS Latitude/Longitude				
Category			Start		End		
Vegetation			37.64063	32 °	37.640632 °		
Item				-121.22153	9°	-121.221539 °	
DWR ID DWR_RD2031_02_f _ 2014_21							
Action/Comments							

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.



View of overgrown vegetation on the levee crown.

LM Start	2.97	Rating **	М	Issue No.		966	
LM End	3.57	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees			37.6376	26 °	37.638301 °	
пеш			-121.207191 °		-121.196465 °		
DWR ID	DWR_RD2	031_02_s _ 201	2_966				

Action/Comments

Trim trees to at least five feet above ground level.
Inspector Comments: Obstructive trees and vegetation along highway are on the landside slope of the levee.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 2031 Elliot

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River	Right	5.98	03/17/2015 03/17/2015	Maksim Khashchuk

LM Start	4.31	Rating **	A/W	Issue No.		1	
LM End	4.31	Issue Type +	Ma	Location *		WS	
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
DWR Erosion Survey			37.6317	16 °	37.631716 °		
item				-121.18937	70 °	-121.189370 °	
DWR ID	DWR_RD2031_02_s _ 2015_1						

Action/Comments

Inspector Comments: 7/17/2014: The erosion has slightly expanded toward levee toe at two pocket locations.

09/10/2013: The site has been visited. The erosion has expanded toward levee crest at two pocket locations.

07/18/2012: No significant change observed on the site.

08/18/2011: No significant change observed on the site. Dead trees and animal activities are visible. The closest point of the erosion site to the levee toe is about 100 ft.

10/19/2010: There is active scouring occurring on the bank due to the nature of the flow and the lack of armor protection. There is also a fallen log immediately downstream of where the erosion has occurred and is protruding outward, possibly creating an eddy and scouring the bank. With the remaining 100-foot wide berm, the levee prism is not yet affected. However, the bank will continue to degrade, and eventually intrude into the levee prism if no protection is put in place. Erosion site is recommended for annual assessment and monitoring during flood events. [2014 Site ID:RD2031U02RM78.7]

Photo 1 of 1: SP_2015_RD2031_308_1_20150317_00001.jpg



Looking downstream. The erosion has progressed toward levee.

LM Start	4.53	Rating **	A/W	Issue No.		22	
LM End	4.53	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Encroachments				37.630855 °		37.630855 °	
Item				-121.1854	42 °	-121.185442 °	
DWR ID DWR_RD2031_02_f _ 2012_22							
Action/Comments							

Pipe

Inspector Comments: 36" discharge pipe through the levee with flap gate closed.

Photo 1 of 1: SP_2015_RD2031_308_22_20150317_00009.jpg



View of the closed flap gate on waterside.